Leslie Brooks Suzukamo, *Pioneer Press*

District Energy and District Cooling have heated and cooled downtown St. Paul for decades, and neither makes a dime off of it.

Both utilities are nonprofits — technically, charities established to help city government provide cheaper and cleaner energy for its businesses and citizens.

If all goes according to plan, they will break ground this fall on what could be a crowning achievement: an environmentally friendly downtown cooling district.

But it's not for St. Paul. The \$253 million air conditioning system will be built 4,000 miles away — in Honolulu, Hawaii.

And the Honolulu project has the potential to be lucrative.

About 15 years ago, the two organizations created a for-profit arm called Ever-Green Energy to manage all their operations. Within Ever-Green is a side business that does consulting and is developing and managing the Honolulu Seawater Air Conditioning Project.

Officials at District Energy and District Cooling hope the Honolulu project does two things: first, raise their profile as consultants — they want to be hired for similar money-making renewable energy projects.

Second, they expect it to bring in revenue to help subsidize St. Paul operations and keep local rates low.

"If we pull this off, the return will be substantial, and we can use it to offset the rates (in St. Paul)

for our customers," said Bill Mahlum, District Energy's chief legal counsel and head of the Hawaii project.

A nonprofit with a for-profit operation isn't unusual, but some District Energy critics have wondered if the nonprofits aren't overreaching.

Xcel Energy, for instance, last year questioned whether it was proper for District Energy to seek \$17 million from the U.S. Department of Energy to expand its signature hot-water heating network down University Avenue while construction of the Central Corridor light-rail line is under way.

But District Energy officials say public interest in renewable energy, such as a \$2 million solar thermal project it unveiled Friday on the roof of the St. Paul RiverCentre, shows it can play a bigger role among the state's utilities. They appear to relish the opportunities presented by both the proposed Central Corridor and Honolulu projects.

"It's a great opportunity to become evangelists, if you will, and promote energy efficiency," Mahlum said.

The Honolulu Seawater Air Conditioning Project is, both technically and managerially, District Cooling St. Paul wearing an aloha shirt.

ALOHA FROM ST. PAUL

The project, set to break ground in September, differs from St. Paul's network of water-carrying pipes mainly in that it taps ocean water about four miles offshore to provide cooling, while St. Paul uses city and well water.

But Honolulu Seawater's management and designers are the same as District Energy and District Cooling's, and on the Honolulu project's Web page, Mahlum and former long-time

District Energy CEO and president Anders Rydaker have adopted the colorful Hawaiian shirts many executives wear in Hawaii.

District Energy officials say Honolulu Seawater was modeled after District Cooling's energy and money-saving efficiency. The system would save on electricity generation and eliminate the need to import 178,000 barrels of fuel oil to Oahu every year, the St. Paul officials estimated in 2008 briefing papers.

District Energy's for-profit, Ever-Green, has a consulting business called Renewable Energy Innovations that invested about \$3 million in the project through its labor. No District Energy or District Cooling cash funded it, Mahlum said.

In return, Ever-Green, through Renewable Energy Innovations, acquired an 11 percent ownership stake, the attorney said.

Ever-Green expects to see a return of about \$700,000 a year for 25 years once the system begins commercial operations, and will use the money to keep rates low in downtown St. Paul, officials, including Rydaker, said.

In contrast, Ever-Green reported a \$30,399 profit last year on revenue of \$3.6 million for its management in St. Paul and consulting fees. Privately held Ever-Green provided the figures at the request of the Pioneer Press.

Success in Hawaii could put Ever-Green, and by extension, District Energy and District Cooling, on the map.

Despite a long history and a stellar reputation inside the small fraternity of district energy organizations, the St. Paul nonprofits are almost invisible to the rest of the world. Their arcane technology of heating and cooling with water pipes, which was borrowed from Sweden 30 years ago, isn't widely used in this country.

HYBRID UTILITY

District Energy and later District Cooling were the brainchildren of former St. Paul Mayor George Latimer and his chief aide, Dick Broeker. During the early oil crises of the late 1970s, they were looking for an alternative to natural gas heating when prices skyrocketed along with the price of oil.

Latimer, now 75 and retired, said he wasn't choosy about who would run District Energy when he unveiled it in 1980. He said he even approached Northern States Power, Xcel Energy's predecessor, about taking it on, but never heard back from its officials.

The entity that emerged didn't fit any neat categories, recalled David Morris, vice president of the Institute for Local Self-Reliance in Minneapolis. He was a young consultant on District Energy back then.

District Energy is private, for instance, but three members of its seven-member board were appointed by the mayor, giving the city a strong say in its management.

It isn't regulated by the Minnesota Public Utilities Commission because it negotiates long-term private contracts with businesses, but the city of St. Paul approves rate increases.

"It works like a co-op, but it's a public-private venture in the best sense of the term," Morris said. He calls it a hybrid.

For the most part, it's been confined to downtown St. Paul. Now, nearly three decades later, District Energy wants to expand down University Avenue, fulfilling a dream Latimer had as far back as 1980.

"If you're going to put in trenches four miles long along University Avenue, you should be talking about what else you're going to put in them," the former mayor said recently.

"The Corridor is a wonderful opportunity," he said, "if it can be brought together."

'REASONABLE,' BUT TOO LATE?

The small nonprofit sought a \$17 million grant from the U.S. Department of Energy to cover half the estimated \$34 million cost of an expansion.

The energy department ordered Oak Ridge National Laboratory in Tennessee to study District Energy's proposal, and Oak Ridge concluded it was a "reasonable and credible technical proposal," according to a letter obtained through a Freedom of Information Act request.

But Oak Ridge balked at a lack of firm commitments for the rest of the money and a tight construction schedule. DOE never came back with an answer, and the St. Paul utility took its silence as a no.

U.S. Rep. Betty McCollum, D-St. Paul, has championed District Energy's pursuit of federal funding, "but our concern is we have missed the window," said Peter Frosch, the congresswoman's legislative director. McCollum continues to seek funding from Vice President Joe Biden's office, the energy department and the Department of Transportation, Frosch said.

Meanwhile, District Energy has a Plan B: a government subsidy of only \$6 million to \$8 million for a shorter route from Hamline Avenue to the Capitol. The Plan B pipe would cost \$12 million, though expanding the system's heating capacity would raise the total expense to \$20 million, District Energy spokeswoman Nina Axelson said. District Energy plans to raise the balance through its own funds, borrowed money and foundation grants.

Because construction on that portion of University Avenue won't begin until 2012, the utility has time for a second request to the energy department, District Energy CEO Ken Smith said. He expects to meet with energy officials sometime in April, Axelson said.

Sen. Julie Rosen, R-Faribault, also introduced a bill recently that calls for an \$8 million bond appropriation for the project. The bill is considered only a placeholder at this point, outlining one possible alternative — aside from federal funding — to finance the proposed expansion. The expansion would be owned by Ramsey County and leased to District Energy, according to Rosen's staff.

Minneapolis-based Xcel stewed last fall when District Energy sought the original \$17 million subsidy.

The investor-supported utility questioned why it should have to compete with a nonprofit getting a government subsidy.

If Xcel lost customers to District Energy, it might have to raise rates on its remaining customers to cover the cost of maintaining its natural gas heating system, it told local chambers of commerce.

Xcel Energy declined for this story to comment on its relationship with District Energy.

"Information about its history and structure should come from DE (District Energy)," Xcel spokeswoman Patti Nystuen said in an email. "Beyond that, we have nothing to add."

Xcel's terse response doesn't surprise St. Paul City Council President Kathy Lantry, a longtime observer of both District Energy and Xcel in City Council chambers.

"It's like a whale and a minnow," she said. Xcel doesn't want to appear to be a bully, she said.

Xcel has been down this road twice already. When District Energy turned on its heating for downtown in 1984, it took 88 commercial heating customers from the old Northern States

Power.
Now, District Energy serves 188 buildings, or 80 percent of downtown, and it reported revenue of \$19.9 million last year.
District Cooling St. Paul started as an \$8.8 million project in 1993 with eight buildings downtown and now serves 98 buildings or 60 percent of downtown. It had revenue of \$7.9 million in 2010, according to documents supplied by District Energy and its managerial arm, Ever-Green.
The districts won customers with an irresistible pitch — help the environment and save money at the same time.
Mostly, it was about the money.
George Fremder is the chairman of District Energy, but before he joined the board, he was property manager for the 400 Building.
In the 1990s, District Energy pitched him on hooking up to its centralized cold-water cooling network. The 400, like every downtown building, was faced with remodeling its air conditioning to meet new environmental requirements then, and Fremder wanted to know his options. His engineers studied the alternatives.
"All of them said we've got to go with District Energy-District Cooling," he recalled.
MANAGING NONPROFITS
Throughout this time, District Energy and District Cooling were cruising. But in the mid-1990s, they ran into a dilemma.

District's then-CEO Anders Rydaker saw a can't-pass-this-up opportunity for the heating district to build its own renewable energy power plant in 1994, something it had wanted from its inception.

Up until then, District Energy used leftover heat from the old NSP High Bridge coal-burning plant. But in 1994, the Legislature required Xcel to buy 125 megawatts of electricity from plants burning renewable biomass such as wood. It was part of a compromise Xcel needed for permission to store spent radioactive fuel from its Prairie Island Nuclear Generating Plant in outdoor casks.

To take advantage, District Energy found a partner, Trigen-Cinergy Solutions, to front the \$52 million needed to built a biomass plant on Kellogg Boulevard next to the Science Museum of Minnesota that burned tree trimmings and other waste wood.

The plant supplies heat for District Energy and 25 megawatts of electricity sold to Xcel.

Trigen-Cinergy and District Energy were supposed to co-own the plant, with District Energy set to pay TrigenCinergy for its share over a 20-year period.

Then, District Energy found out it could not remain a nonprofit if it went ahead. Rules for nonprofits forbid getting 25 percent or more of their revenue from only one customer — in this case, Xcel Energy, Mahlum said.

District Energy did not want to give up its nonprofit status nor its dream of having a biomass plant.

So Mahlum created a for-profit entity that would co-own the generating plant with Trigen-Cinergy. It would also own the waste-wood-collecting enterprise that supplied the plant.

Initially dubbed Market Street Energy for its location in the Landmark Towers on Market Street, the for-profit also would manage District Energy, District Cooling and Energy Park Utilities.

Putting Market Street, which changed its name to Ever-Green in 2007, in charge of everything was the most efficient way of structuring the company, Mahlum said. Ever-Green charges District Energy and District Cooling management fees but only what it needs to run them, he said.

'EXPORT CROP'

It's not as unusual as it may sound, said Christine Durand, spokeswoman for the Minnesota Council of Nonprofits.

Increasingly, nonprofits are creating for-profit arms to stabilize their finances. The Bremer Foundation, for instance, owns Bremer Bank.

And it's more efficient to have the for-profit run everything instead of having separate staffs for each, she said.

According to Mahlum, District Energy has kept its rate increases below the cost of inflation for 27 years and had annual audits from the city Auditor's office throughout.

The heating district has had an average rate increase of 2.5 percent per year since 1983, and the cooling entity has raised rates by an average of 2 percent per year since its inception in 1993, said Todd Hurley, the city's treasurer.

The biomass plant — sometimes called a co-generation plant because it produces both heat and electricity — cranked up in 2003. Trigen-Cinergy got bought by Duke Energy, a \$12.7 billion investor-owned utility based in Charlotte, N.C., and Duke now holds half-ownership in the co-generation plant with Ever-Green.

Some people have grumbled over the years that Ever-Green means District Energy/District Cooling aren't true nonprofits anymore, but the district officials and their supporters refute that.

"The key question is who controls the entity, not who manages it," Morris said.

Ever-Green can become the growth engine for the utilities, and its consulting know-how is an "export crop," Morris said.

"If we had a manufacturing company that was selling to Hawaii, we'd be applauding it," he said. "It's a wonderful next step."